1

-------------------------------------------------------------------

FIND ARMSTRONG NUMBER

-------------------------------------------------------------------

import java.io.\*;

import java.util.\*;

import java.lang.Math;

public class ArmstrongNo

{

static void checkArmstrong(int n)

{

int count=0,rem=0,temp=n;

double x=0.0;

while(temp!=0)

{

temp=temp/10;

count=count+1;

}

System.out.println("Number of digits is "+count);

temp=n;

while(temp!=0)

{

rem=temp%10;

x= x + Math.pow(rem,count);

temp=temp/10;

}

if(x==n)

{

System.out.println("Given number " + n + " is an armstrong number");

}

else

{

System.out.println("Given number " + n + " is not an armstrong number");

}

}

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter a number:");

int a=sc.nextInt();

System.out.println("Entered number:"+a);

checkArmstrong(a);

}

}

-----------------------------------------------------------------------

2 ARMSTRONG NUMBER RANGE BETWEEN 100-999

--------------------------------------------------------------------

import java.io.\*;

import java.lang.Math;

import java.util.\*;

public class ArmstrongNumberRange

{

static void checkArmstrongRange()

{

int i;

for(i=101;i<1000;i++)

{

int count=0,rem=0,temp=i;

double x=0.0;

while(temp!=0)

{

temp=temp/10;

count=count+1;

}

//System.out.println("Number of digits is "+count);

temp=i;

while(temp!=0)

{

rem=temp%10;

x= x + Math.pow(rem,count);

temp=temp/10;

}

if(x==i)

{

System.out.println("Given number " + i + " is an armstrong number");

}

}

}

public static void main(String[] args)

{

checkArmstrongRange();

}

}

----------------------------------------------------------

3 FIND SIMPLE AND COMPOUND INTEREST

-------------------------------------------------------------

import java.io.\*;

import java.util.\*;

import java.lang.Math;

public class SimpleAndCompoundInterest

{

static double simpleInterest(double p,double t,double r)

{

double simple;

simple=(p\*t\*r)/100;

return simple;

}

static double compoundInterest(double p,double t,double r)

{

double compound;

compound= p\*(Math.pow((1 + (r/100)),t));

return compound;

}

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

double p,t,r;

double s,c;

System.out.println("Enter Principal: ");

p=sc.nextInt();

System.out.println("Enter Time: ");

t=sc.nextInt();

System.out.println("Enter Rate: ");

r=sc.nextInt();

s=simpleInterest(p,t,r);

c=compoundInterest(p,t,r);

System.out.println("Simple Interest is "+ s + " and Compound Interest is " + c);

}

}

----------------------------------------------------------------

4 FIND THE RESULTS OF EACH SUBJECTS

----------------------------------------------------------------

import java.io.\*;

import java.util.\*;

import java.lang.Math;

public class ResultOfThreeSubjects

{

static void result(int [] x)

{

if(x[0] > 60)

{

if(x[1] > 60)

{

if(x[2] > 60)

{

System.out.println("Passed");

}

else

{

System.out.println("Promoted");

}

}

else

{

System.out.println("Failed");

}

}

else

{

System.out.println("Failed");

}

}

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int i=0,j=0,temp;

int a[]=new int[3];

System.out.println("Enter marks of three subjects: ");

for(i=0;i<3;i++)

{

a[i]=sc.nextInt();

}

for(i=0;i<3;i++)

{

for(j=i+1;j<3;j++)

{

if(a[i] < a[j])

{

temp=a[i];

a[i]=a[j];

a[j]=temp;

}

}

}

result(a);

}

}

------------------------------------------------------------

5 CALCULATE THE INCOME TAX

------------------------------------------------------------

import java.io.\*;

import java.util.\*;

import java.lang.Math;

public class IncomeTax

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

double tax=0.0;

System.out.println("Enter your salary (per annum): ");

double salary=sc.nextDouble();

System.out.println("You salary per annum is "+salary);

if((salary > 0) && (salary < 180000))

{

tax=0.0;

}

else if((salary > 181001.0) && (salary < 300000.0))

{

tax=salary\*(0.1);

}

else if((salary > 300001) && (salary < 500000))

{

tax=salary\*(0.2);

}

else if((salary > 500001) && (salary < 1000000))

{

tax=salary\*(0.3);

}

System.out.println("The income tax amount need to be paid is " +tax);

}

}

---------------------------------------------------------------------

6 VALIDATE LOGIN FOR A USER

---------------------------------------------------------------------

import java.io.\*;

import java.util.\*;

import java.lang.Math;

class ValidateLogin

{

static void validation(String name,String pwd,int attempts)

{

String n="Shuaib",p="123";

int result;

if(attempts!=3)

{

if(name.equals(n) && pwd.equals(p))

{

System.out.println("Welcome " + name);

}

else

{

System.out.println("Invalid Login");

attempts=attempts+1;

enterDetails(attempts);

if(attempts==3)

{

System.out.println("Login limit exceeded....!!!");

}

}

}

}

static void enterDetails(int attempts)

{

Scanner sc=new Scanner(System.in);

String password,name;

System.out.println("Enter the username:");

name=sc.next();

System.out.println("Enter password:");

password=sc.next();

//System.out.println(name+" "+password);

validation(name,password,attempts);

}

public static void main(String[] args)

{

int attempts=1;

enterDetails(attempts);

}

}

---------------------------------------------------------------

7 SEARCH IN ARRAY

----------------------------------------------------------------

import java.io.\*;

import java.util.\*;

import java.lang.Math;

public class SearchInArray

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int a[]=new int[15];

int i,key;

boolean found=false;

System.out.println("Enter 15 elements in the array: ");

for(i=0;i<15;i++)

{

a[i]=sc.nextInt();

}

System.out.println("Enter the element to be searched: ");

key=sc.nextInt();

for(i=0;i<15;i++)

{

if(a[i]==key)

{

found=true;

System.out.println("Key " + key + " found in the array");

break;

}

}

if(found==false)

{

System.out.println("Key " + key + " not found in the array");

}

}

}

---------------------------------------------------------------

8 BUBBLE SORT IN AN ARRAY

-----------------------------------------------------------

import java.io.\*;

import java.util.\*;

import java.lang.Math;

public class BubbleSort

{

static void bubbleSort(int a[],int key)

{

int i,j,temp;

boolean found=false;

for(i=0;i<14;i++)

{

for(j=0;j<(14-i);j++)

{

if(a[j] > a[j+1])

{

temp=a[j];

a[j]=a[j+1];

a[j+1]=temp;

}

}

}

for(i=0;i<15;i++)

{

if(a[i]==key)

{

found=true;

System.out.println("Key " + key + " found in the array");

break;

}

}

if(found==false)

{

System.out.println("Key " + key + " not found in the array");

}

}

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int a[]=new int[15];

int i,key;

System.out.println("Enter 15 elements in the array: ");

for(i=0;i<15;i++)

{

a[i]=sc.nextInt();

}

System.out.println("Enter the element to be searched: ");

key=sc.nextInt();

bubbleSort(a,key);

}

}

---------------------------------------------------------

9 FIND TOTAL AND AVERAGE

--------------------------------------------------------------

import java.io.\*;

import java.util.\*;

import java.lang.Math;

public class TotalAndAvg

{

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

int a,b,c,total;

double avg=0.0;

System.out.println("Enter the marks of A subject: ");

a=sc.nextInt();

System.out.println("Enter the marks of B subject: ");

b=sc.nextInt();

System.out.println("Enter the marks of C subject: ");

c=sc.nextInt();

total=a+b+c;

avg=(total/3);

System.out.println("Total marks scored is "+total+" and average is "+avg);

//System.out.println("Total marks in A subject is "+a+" its average is "+(a/100));

}

}